

What is Claimed is;

1. An expander roll comprising a plurality of metallic, cylindrical roll members attached to an outer periphery of a curved shaft with bearings; and a ring-shaped elastic packing with which a gap between ends of adjoining, cylindrical roll members is closed, the packing provided inside the ends of the roll members; wherein outer surfaces of both side parts of a part of an outer circumferential surface of the ring-shaped elastic packing that faces the gap between the roll members are fixed to inner surfaces of the cylindrical roll members, and the ring-shaped elastic packing is deformed in accordance with a movement in a lengthwise direction of the adjoining, cylindrical roll members.

2. The expander roll of Claim 1, wherein a gap-facing concave portion is formed in the part of the outer circumferential surface of the ring-shaped elastic packing that faces the gap between the adjoining, cylindrical roll members, and outer surfaces of both side parts of the gap-facing concave portion are fixed to inner surfaces, respectively, of the cylindrical roll members each of which is disposed on a side identical to a side of each side part of the outer surfaces, whereby both of the side parts of the gap-facing concave portion are deformed in accordance with a movement in a lengthwise

direction of the adjoining, cylindrical roll members.

3. The expander roll of Claim 1 or Claim 2, wherein one concave portion or a plurality of concave portions are formed in the outer surfaces of both side parts of the part of the outer circumferential surface of the ring-shaped elastic packing that faces the gap between the adjoining, cylindrical roll members, and both side parts of the gap-facing part are formed like pleats, and outer surfaces of pleat-like portions and the inner surfaces of both cylindrical roll members are fixed, whereby the pleat-like portions are deformed in accordance with the movement of the cylindrical roll members in the lengthwise direction.

4. The expander roll of Claim 3, wherein the pleat-like portion of each side part of the gap-facing part has its intermediate part between its base and its end, the intermediate part smaller in width than the base and the end.

5. The expander roll of Claim 3, wherein a bottom corner part of the gap-facing concave portion or of another concave portion is shaped like an arcuate concave.

6. The expander roll of Claim 3, wherein a fixing operation between the outer surfaces of the pleat-like portions in both sides of the gap-facing part of the outer surface of the ring-shaped elastic packing and the inner surface of the

cylindrical roll member is performed by use of a sealing and bonding agent that has both liquidtightness and bonding properties.

7. The expander roll of Claim 6, wherein a groove is formed in the outer circumferential surface in the pleat-like portion, and the sealing and bonding agent is poured into the groove.

8. The expander roll of Claim 1 or Claim 2, wherein a similarly ring-shaped flange is provided at each end of the ring-shaped elastic packing; an edge of a sleeve extending in the lengthwise direction of the curved shaft is attached to an inner periphery of each flange; a closed-cell foamed ring is formed to be adjacent to both the flanges; a cylindrical spacer and a cleat are provided on a side opposite to the flange in the foamed ring; and the cylindrical spacer and the flange are bonded to both side faces of the foamed ring with the sealing and bonding agent.